

### **REMARKS**

As a supplement to the Office Action response filed on July 20, 2010, applicant has further amended claims 18, 23 and 25.

Applicants have carefully reviewed the Office Action mailed April 20, 2009, and thank Examiner Holmes for the detailed review of the pending claims. In the July 20, 2010 Amendment, Applicants amended claims 1 and 18, and added new claims 20 – 25. By way of that amendment, no new matter has been added. As previously stated, support for the amendments can be found throughout the specification and at least in paragraphs [0004], [0013], [0014] and FIG. 2. Accordingly, claims 1 – 4, 7 and 18 – 25 remain pending in this application.

However, Applicants intended to amend claim 18 to recite that “the multi-plate coupling is arranged so as to be effective between the differential carrier and the second sideshaft gear.” Applicants also intended that claims 23 and 25 depend from claim 18 instead of claim 1. Accordingly, this supplemental amendment includes these changes to claims 18, 23 and 25.

This Supplemental Amendment supplements, and replaces, the amendment filed on July 20, 2010, in response to the Office Action dated April 20, 2010. It is respectfully requested that this Supplemental Response be considered and entered. Inasmuch as the Examiner is not believed to have yet considered Applicants’ paper dated July 20, 2010, it is not believed that consideration of this Supplemental Response will result in any delays or inefficiencies in prosecution.

At least for the reasons set forth below, Applicants respectfully traverse the foregoing rejections. As Applicants’ remarks with respect to the Examiner’s rejections are sufficient to overcome these rejections, Applicants’ silence as to assertions by the Examiner in the Office Action or certain requirements that may be applicable to such rejections (e.g., whether a reference constitutes prior art, motivation to combine references, assertions as to dependent claims, etc.) is not a concession by Applicants that such assertions are accurate or such requirements have been met, and Applicants reserve the right to analyze and dispute such assertions/requirements in the future. Further, for any instances in which the Examiner took Official Notice in the Office Action, Applicants expressly do not acquiesce to the taking of Official Notice, and respectfully request that the Examiner provide an affidavit to support the Official Notice taken in the next Office Action, as

required by 37 CFR 1.104(d)(2) and MPEP § 2144.03. Applicants respectfully request reconsideration of the present application in view of the above amendments, the new claims, and the following remarks.

**Claim Rejections – 35 U.S.C. § 103**

**I. Teraoka et al. (Japanese Patent JP 61062640A) in view of Szuba (U.S. Patent No. 6,945,898)**

Claims 1 and 2 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Teraoka et al. (Japanese Patent JP 61062640A) (hereinafter, “Teraoka”) in view of Szuba (U.S. Patent No. 6,945,898) (hereinafter, “Szuba”). Applicants respectfully traverse the rejection.

Teraoka and Szuba, taken singularly or in any permissive combination, both fail to teach or suggest the recitations of amended independent claim 1.

Independent claim 1, as amended, is directed to “[a] differential drive with a rotatably arranged differential carrier in which a first sideshaft gear and a second sideshaft gear are arranged, wherein a multi-plate coupling is arranged so as to be effective between the differential carrier and the second sideshaft gear, said multi-plate coupling comprising a hub and a plate package, said hub of said multi-plate coupling being produced so as to be integral with said second sideshaft gear, the differential carrier comprising a dish-shaped carrier part in which there are received the first and second sideshaft gears and differential gears, and a dish-shaped cover which receives the plate package of the multi-plate coupling, wherein the plate package of the multi-plate coupling is axially supported against the dish-shaped carrier part, wherein the dish-shaped carrier part and the dish-shaped cover each comprise a connecting portion arranged so as to oppose one another to inter-connect the carrier part with the cover such that the carrier part and cover are oriented to extend away from each other at the connecting portions.”

Neither Teraoka nor Szuba teach or suggest at least the recitations of claim 1, as amended. Specifically, Teraoka and Szuba fail to teach or suggest “wherein the plate package of the multi-plate coupling is axially supported against the dish-shaped carrier part of the differential carrier, wherein the dish-shaped carrier part and the dish-shaped cover each comprise a connecting portion arranged so as to oppose one another to inter-connect the carrier part with the cover such that the

carrier part and cover are oriented to extend away from each other at the connecting portions” as recited within the context of amended claim 1.

Instead, Teraoka discloses two different designs for a differential assembly. The embodiment according to FIG. 1 discloses a differential assembly wherein there is provided an adapter 9 between the right-hand sideshaft gear and the sidewall 1a of the differential case 1. Additionally, Teraoka teaches that an adapter 9 is keyed fixedly to a boss portion 7a of the side gear 7, and between the pressing portion 9a and the side wall 1a of the differential case 1 is disposed a multiple disk clutch 11. *See Teraoka, page 6 of the English translation.* Clutch disks 13 and clutch plates 15 of the multiple disk clutch 11 are disposed from the back surface to the inside position of the side gear 7 to enlarge the frictional radius. *See Teraoka, page 6 of the English translation.* Thus, the clutch plates 15 are axially supported against the adapter 9 (towards the left-hand side of FIG. 1), wherein the adapter is axially supported against the sideshaft gear 7. Therefore, Teraoka fails to teach or suggest at least that “the plate package of the multi-plate coupling is axially supported against the dish-shaped carrier part, wherein the dish-shaped carrier part and the dish-shaped cover each comprise a connecting portion arranged so as to oppose one another to inter-connect the carrier part with the cover such that the carrier part and cover are oriented to extend away from each other at the connecting portions,” as recited within the context of independent claim 1.

Moreover, Teraoka’s second embodiment, as illustrated in FIG. 2, reflects a conventional differential assembly. The differential assembly comprises a differential gear set 105, 107 which are accommodated in the differential case 1 and a multi-disk clutch 111 which is axially supported against the right-hand sideshaft 107 on the radial inside of the clutch disks 113. *See Teraoka, pages 3 and 4 of the English translation.* Therefore, for this additional reason, Teraoka fails to teach or suggest at least that “the plate package of the multi-plate coupling is axially supported against the dish-shaped carrier part, wherein the dish-shaped carrier part and the dish-shaped cover each comprise a connecting portion arranged so as to oppose one another to inter-connect the carrier part with the cover such that the carrier part and cover are oriented to extend away from each other at the connecting portions,” as recited within the context of independent claim 1.

Szuba fails to make up for the deficiencies of Teraoka, as Szuba discloses a differential mechanism having a spline portion 98, which is formed in the inner surface 94 of the wall 96. *See Szuba, Col. 6, lines 48 – 49.* The spline portion is adapted to receive clutch plates (not shown) known to those of skill in the art to provide enhanced gear shifting properties to the transmission. *See Szuba, Col. 6, lines 47 – 53.* Thus, the clutch plates are positioned towards the inside of the differential mechanism and are supported against the sideshaft gears, which is clearly not the same as being supported by the wall 96 towards the inside, since the wall (i.e. differential cage) does not have any respective supporting face. Therefore, Szuba also fails to teach or suggest “the plate package of the multi-plate coupling is axially supported against the dish-shaped carrier part, wherein the dish-shaped carrier part and the dish-shaped cover each comprise a connecting portion arranged so as to oppose one another to inter-connect the carrier part with the cover such that the carrier part and cover are oriented to extend away from each other at the connecting portions,” as recited within the context of independent claim 1. Both Teraoka and Szuba taken singularly or in combination fail to obviate Applicants’ independent claim 1. Accordingly, for at least the forgoing reasons, independent claim 1 and claim 2, depending therefrom, are allowable. Withdrawal of the rejection is respectfully requested.

**Teraoka in view of Szuba and in view of Roscoe (U.S. Patent No. 6,460,677)**

Claims 3, 4, 7, 18 and 19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Teraoka in view of Szuba and in view of Roscoe (U.S. Patent No. 6,460,677) (hereinafter, “Roscoe”). Applicants respectfully traverse the rejection.

**Independent Claim 18**

Teraoka, Szuba and Roscoe, taken singularly or in any permissive combination, all fail to teach or suggest the recitations of amended independent claim 18.

Independent claim 18, as amended, is directed to “[a] differential drive with a rotatably arranged differential carrier in which a first sideshaft gear and a second sideshaft gear are arranged, wherein a multi-plate coupling is arranged so as to be effective between the differential carrier and a sideshaft gear, said multi-plate coupling comprising a hub and a plate package, said hub of said multi-plate coupling being produced so as to be integral with said second sideshaft

gear, the differential carrier comprising: a dish-shaped carrier part in which there are received the first and second sideshaft gears and differential gears, and a dish-shaped cover which receives the plates of the multi-plate coupling, wherein the plate package of the multi-plate coupling is axially supported against the dish-shaped carrier part, wherein the carrier part and the cover each comprise a base portion, a casing portion and a connecting portion for interconnecting the carrier part with the cover, wherein the carrier part and the cover are connected such that the base portions are arranged on opposite sides with regard to said connecting portions, and wherein the differential drive further comprises a sleeve arranged on an outside of the cover which sleeve axially supports an actuator for the multi-plate coupling.”

The remarks presented above in connection with the § 103 combination of Teraoka and Szuba are equally applicable here. Specifically, the inadequacy of Teraoka or Szuba, taken singularly or in combination, to teach or suggest every element of independent claim 1 is also fatal to the Examiner’s § 103 Teraoka, Szuba and Roscoe combination rejection. Indeed, Roscoe fails to make up for the inadequacies of Teraoka and Szuba.

Specifically, Roscoe *teaches away* from a differential drive where “the plate package of the multi-plate coupling is axially supported against the dish-shaped carrier part, wherein the carrier part and the cover each comprise a base portion, a casing portion and a connecting portion for interconnecting the carrier part with the cover, wherein the carrier part and the cover are connected such that the base portions are arranged on opposite sides with regard to said connecting portions, and wherein the differential drive further comprises a sleeve arranged on an outside of the cover which sleeve axially supports an actuator for the multi-plate coupling,” as recited within the context of claims 1 and 18.

More specifically, Roscoe fails to disclose a plate package that is axially supported against a dish-shaped carrier part where the carrier part and the cover each comprise a base portion, a casing portion and a connecting portion for interconnecting the carrier part with the cover, wherein the carrier part and the cover are connected such that the base portions are arranged on opposite sides with regard to said connecting portions within the context of claim 18. Thus, a skilled person would not combine Roscoe with the Examiner cited references of Teraoka and Szuba.

Moreover, Roscoe further *teaches away* from the alleged combination and Applicants' claim 18, as Roscoe discloses having an outer case part 12b, within the outer case part 12b, an inner case part 12c, for assembly purposes the sleeve 17a and the output element 17 have to be designed as separate parts. In contrast, Applicants' sideshaft gear and hub of the multi-plate coupling are integrally formed (i.e. formed in one piece). Therefore, for this additional reason Teraoka, Szuba and Roscoe, taken singularly or in combination, fail to teach or suggest all of the recitations of independent claim 18.

Accordingly, for at least the forgoing reasons, independent claim 18 and claim 19, depending therefrom, are allowable. Withdrawal of the rejection is respectfully requested.

#### **Dependent Claims 3, 4 and 7**

Claims 3, 4 and 7 are dependent on claim 1. The remarks presented above with respect to the §103 claim 1 rejection are equally applicable here. Specifically, the inadequacy of the Teraoka and Szuba combination to teach every element of independent claim 1 by not disclosing "wherein the plate package of the multi-plate coupling is axially supported against the dish-shaped carrier part, wherein the dish-shaped carrier part and the dish-shaped cover each comprise a connecting portion arranged so as to oppose one another to inter-connect the carrier part with the cover such that the carrier part and cover are oriented to extend away from each other at the connecting portions" is also fatal to the Examiner's §103 Teraoka, Szuba and Roscoe combination rejection.

Additionally, as similarly recited in the § 103 claim 18 rejection, the combination of Teraoka, Szuba and Roscoe fails to disclose "said multi-plate coupling comprising a hub and a plate package, said hub of said multi-plate coupling being produced so as to be integral with said second sideshaft gear." Accordingly, for at least these reasons, Applicants respectfully request reconsideration and withdrawal of the rejection.

#### **New Claims**

New claims 20 – 25 have been added in this Amendment for the Examiner's consideration. New claims 20 and 22 – 25 depend from claim 1 and new claim 21 depends from claim 18. Support for new claim 24 may be found at least in paragraphs [0004], [0013], [0014] and FIG. 2. of the Application as originally filed. The cited references, whether taken singularly or in any

permissible combination, do not anticipate, teach or suggest the subject matter recited in new claims 20 – 25. The Examiner's consideration of new claims 20 – 25 is respectfully requested.

### **CONCLUSION**

In view of the above amendment and remarks, the pending application is in condition for allowance. If, however, there are any outstanding issues that can be resolved by telephone conference, the Examiner is earnestly encouraged to telephone the undersigned representative.

It is believed no fees are due with this response. However, if any fees are required in connection with the filing of this paper that are not identified in any accompanying transmittal, permission is given to charge our Deposit Account No. 18-0013, under Order No. 66968-0020 from which the undersigned is authorized to draw. To the extent necessary, a petition for extension of time under 37 C.F.R. §1.136 is hereby made, the fee for which should also be charged to this Deposit Account.

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